

Patent Abstracts of Japan

PUBLICATION NUMBER : 01244405
PUBLICATION DATE : 28-09-89

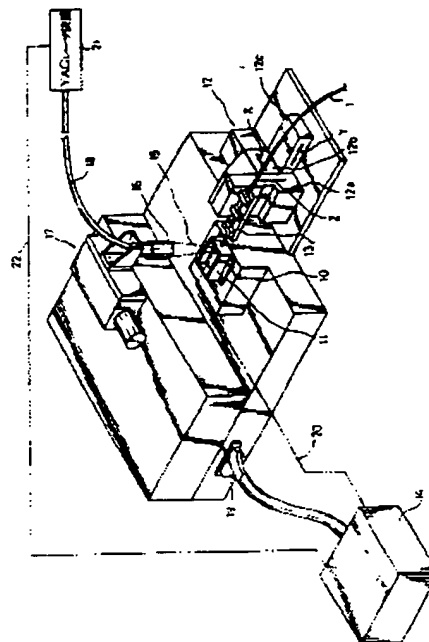
APPLICATION DATE : 25-03-88
APPLICATION NUMBER : 63072973

APPLICANT : SUMITOMO ELECTRIC IND LTD;

INVENTOR : SHIGA NOBUO;

INT.CL. : G02B 6/24

TITLE : OPTICAL FIBER FIXING DEVICE



ABSTRACT : PURPOSE: To align the optical axes of an optical fiber and optical working part by once fixing the optical fiber by solder, etc., after the optical axis alignment of the fiber, then melting again the optical fiber fixing material, giving an offset to the optical fiber and solidifying the fixing material.

CONSTITUTION: Exact positioning and fixing of the optical fiber to a fixing base in an optical module 11 are first executed by controlling an electrically driven manipulator 12 which can hold the optical fiber 1 and can move the same in an arbitrary direction by a control device 14 to move the same until the optical axes of the optical fiber 1 and the optical working part are aligned. The condensing part of a laser beam 15 is thereafter moved by an electrically driven manipulator 17 above the optical module 11 to fix the optical fiber 1 once by soldering to the suitable point of the optical module 11. The fixed solder is again melted thereafter and the optical fiber 1 is moved backward by as much as the quantity of the misalignment of the optical axes generated at the time when the solder cools to solidify and thereafter, the solder is solidified. Namely, the soldered optical axes are aligned by giving the offset thereto.

COPYRIGHT: (C)1989,JPO&Japio

